Project Summary Sheet

Project Name: City of St. Helena Flood Protection and Flood Corridor Restoration Project

Tracking No: 200784107

Location: City of St. Helena County; Napa, CA

County: Napa

Project Sponsor: City of St. Helena

Point of Contact: Bert Johansson, (707) 967-2792

Co-applicant(s): None

Assembly District: #7 Noreen Evans **Senate District:** #2 Pat Wiggins

Project Summary: The City of St. Helena Flood Protection and Flood Corridor Restoration Project will protect 468 existing mobile homes, single-family dwellings, and low-income multifamily units from flood damage caused by the Napa River overflow through the incorporated City of St. Helena in Napa County. This multi-objective project will provide flood damage reduction through restoration and re-establishment of the natural floodplain along the project creek frontage; construction of set back levees and overflow basins for transitory storage; and the re-creation and restoration of a natural floodway corridor. It will create more than 8 acres of high-value riparian forest and shoreline restoration for terrestrial and fish habitat on the Napa River, which is listed by the EPA as an impaired waterway and by National Marine Fisheries Service as an important steelhead and salmon recovery tributary of the San Francisco Bay Estuary. In addition, the project will allow residents to view and access this reach of the Napa River, which currently cannot be accessed.

The project addresses Flood Protection Corridor Program Goals by:

- Floodplain Terrace at more than 8 acres, the new terrace will stretch alongside the Napa River. This terrace will provide a wider area for passage of floodwaters and also provide riparian habitat for rare and common species.
- Shoreline Restoration Approximately 600 feet of existing bank protection riprap and wire gabion at the Vineyard Valley Mobile Home Park (VVMHP) will be removed and the shoreline restored, improving habitat for steelhead, California freshwater shrimp, and critical habitat for the California red-legged frog, as well as for common species.
- Levee A new setback levee will be constructed.
- Removal of Mobile Homes Approximately 17 mobile homes have been removed to make room for a wider floodway corridor.

- Floodwall/Bank Stabilization A new setback floodwall will be constructed to surround the remaining homes within the Vineyard Valley Mobile Home Park. Up to 300 feet of bioengineered and/or structural bank stabilization would be placed near the confluence of the Napa River and Sulphur Creek to protect a portion of the VVMHP floodwall.
- Stormwater Management for Water Quality. A detention basin and pumping facility will be placed inboard of the new levee and northwest of the existing VVMHP floodwall. The two existing storm drains will be diverted into this basin and the two existing storm drain outfalls into the Napa River will be abandoned. A drainage swale will run along the outboard edge of the new levee to filter area stormwater before entering the Napa River. Water quality will be improved as unfiltered storm water passes through the detention basin and the vegetated swale in the terrace.
- Vegetation Management At the southeastern end of the project area, riparian vegetation will be managed in an area referred to as "Element C" to protect critical environmental habitat and improve flood storage capacity upstream of the Pope Street Bridge.
- Public Trail An interpretive pedestrian path will be included in the design of Terrace B to provide public access where no public access currently exists.
- Utility Relocations/Modifications Water, sanitary sewer, gas, electrical, telephone, and cable TV utilities will be disconnected and removed in the areas of home removal for a wider flood corridor in this currently constrained and incised reach of the Napa River.

Flood Benefits: The floods of 1986 and 1995 caused complete flooding at Vineyard Valley Mobile Home Park (VVMHP); Hunts Grove Apartments; and the City's wastewater treatment plant. Estimated damages were more than $50 million in each event. The Project will increase critical transitory storage through the dedication of parcel 31 (14) acres to permanent flood corridor, the purchase and relocation of the mobile homes along the bank of Napa River and the resulting excavation and restoration of the floodplain terrace and the construction of set back levees. This transitory storage increase allows 100-year water surface elevations to be significantly reduced by 1.5 feet from current conditions without inducing either upstream or downstream flooding.

The excavated floodplain terrace, located along the western edge of the Napa River, is expected to reduce flood water surface elevations by 1.5 feet during 100-year flows. The terrace will encompass approximately 7 acres along 1,400 linear feet of the main channel. The lower downstream portion of the terrace is designed to backwater at the 1.5- year flow, and the higher upstream portion will inundate at the 10-year flow. The terrace will be graded to drain positively to a downstream outlet and will incorporate a low flow channel to direct drainage to the Napa River. Terrace width will range from 100 to 650 feet will include numerous hummocks, swales, and benches to provide habitat complexity. The terrace is designed to replicate natural point bar formation at the downstream outlet.

Agricultural Benefits: N/A

Agricultural Land Conserved: N/A

Wildlife Benefits: The proposed project addresses key elements of concern for biological productivity in the Napa River, especially for salmonids, steelhead and Chinook salmon), California freshwater shrimp, California red-legged frogs, and excessive erosion and sedimentation from channel incision and failing channel banks.

Along the western bank of the Napa River in the Project area, approximately 550 feet of existing bank protection, riprap, and wire gabions will be removed and the shoreline restored. The bank will be re-contoured to create a series of benches emulating natural point bar formations and large woody debris will be incorporated at the toe to provide aquatic habitat complexity. Lower benches will be frequently inundated, and suitable for dense willow (Salix spp.) and alder (Alnus spp.) communities. Existing mature vegetation will be preserved and additional native vegetation will be planted.

Total area conserved: 26.2 acres

Terrace B	7.9 acres
Riverine	6.3 acres
Levee/Floodwall	5.6 acres
Detention Basin	1.3 acres
Upland	5.1 acres
Total FPCP	26.2 acres

Other Benefits: The construction of the levee east of Adams Street will provide a secondary evacuation route from VVMHP, which now has only one escape route

Total Cost: $32,538,000

FPCP Cost: $5,000,000 The applicant has indicated that $3.1 million is the minimum that would make the project feasible, and that there will be alternate funding to construct the entire project even if the FPCP grant amount is reduced to $3.1 million.

Funding Partners and Share of Cost: Local Funds contributed is $15,238,000 and additional funding of $12,300,000.

Supplemental Information:

1. Is there a full hydrologic report with the application, or is there simply an engineer's opinion? Either way, what is the conclusion as to the anticipated flood benefits of the project? Response: There is a full hydrologic report done by MBK Engineers. The conclusion is that the project will allow the project area to

withstand a 100-year storm with 3 feet of freeboard, and a 500-year storm with 1 foot of freeboard.

2. What exactly will the FPCP funds pay for? Response: Construction of the transitory storage basin on the terrace adjacent to the creek, habitat planting, setback levee construction, re-routing storm drains through detention basin, and installing a pump station.
    a. If the project applicant indicated they could accept less – then what (if anything) would be cut from the project? (What is lost by providing less FPCP grant money?) Response: The applicant indicated $3.1 million would enable them to do the entire project because of anticipated replacement funding from another source (assessment district).

    b. Does the applicant have access to alternate funding to replace the amount deducted from their request so that they can still spend the total amount they requested? If so, what would be the alternate funding source(s) and is the alternate funding already allocated, promised or committed? Response: The applicant is creating an assessment district to cure funding gaps and expects the beneficiaries to approve it because the assessment costs will be offset by reductions in the cost of flood insurance.

    c. When giving a project score credit for matching funds, how much of the funding is matched? What is the source of the matching funds and are the matching funds already committed? Response: Except for the assessment district which is being formed, matching funds are available from other sources including the ½ cent sales tax previously approved by voters in Napa County.

3. If there is funding for acquisition of property, what is the type of ownership? Easement? Fee title? Or Both? Response: Fee title
    a. Who will own the easement or fee title? DWR? Project applicant? Other? Response: Ownership will be held by the City of St. Helena. The City is willing to convey an easement or implement some other type of deed restriction to ensure flood and conservation uses in perpetuity. Holder of the easement is yet to be determined.

4. Does any portion of the project site have mitigation bank potential for DWR to gain mitigation credits for its maintenance program? (Note: Mitigation property would need to be within 40 miles of the disturbance area that needs to be mitigated) Response: No.

5. Is the project a USACE authorized project? If so, is there USACE funding for the project? Should the USACE be fully funding the project? Response: The

project was authorized as a USACE project in the recent Water Resources Development Act but no funds have been appropriated.

6. Can the management of transitory water storage on the site be optimized for flood benefit? (look to the hydrology report for info on this). Is the applicant willing to work with DWR on water management during extreme flood events? Response: The project design already optimizes flood risk reduction. The transitory storage basin captures water from tributary storm drains and is not designed to pull water out of the main creek channel.